Notes from the IWX Integrated Warning Team Workshop
Kosciusko County Courthouse, Warsaw Indiana
October 17th, 2012

On Wednesday October 17th, 2012, WFO IWX hosted an Integrated Warning Team (IWT) Workshop for local NWS representatives, Emergency Managers and first responders, and media partners across northern Indiana and northwest Ohio. Jim Allsopp, Mike Bardou, Jamie Enderlen and Mark Ratzer attended the workshop from WFO Chicago.

The purpose of the IWT workshop was for these partner groups to gain familiarity and understanding, and discuss solutions for each other's data needs and requirements, with a purposely narrow focus (to prevent the discussions from going in too many directions and to develop simple actionable items) on **data integration to aid team situational awareness**. In other words, trying to find ways to share data more easily (for instance, reports of severe weather) between these partners.

The workshop consisted of presentations from NWS, EM and media representatives, and a group break-out session in the afternoon. These activities are summarized here.

Presentation 1: Data and Decision Making. Leveraging Technology During Severe Weather (Nick Greenawalt and Evan Bentley – NWS IWX)

This presentation focused on data integration needs from an NWS perspective during severe weather events. Access to ground truth is very important to the warning decision making process during these events, with a plethora of various data to ingest and analyze. The benefits of using social media, specifically Facebook and Twitter, were discussed. Some of the highlights included the ideas that these media provide nearly instant communication directly to the public, and often make pictures and video reports of severe weather available. Twitter in particular was discussed as a method of gaining rapid access to a common pool of public reports, with the additional capability of organizing and searching through Twitter hash-tags. Geo-referenced searches can also be done with Twitter, for example, searching for tornado within a 50 mile radius of your location. Use of these social media platforms has the potential to produce better lead times, and few false alarms which provides better service to the public.

Presentation 2: Media Partnerships with NWS and Emergency Managers (Cindi Clawson WNDU South Bend and Jonathan Conder WANE Fort Wayne)

The main goal of the media partners was stated as getting accurate information to their viewers as quickly as possible. With respect to the NWS, they expressed that NWSChat was a great tool, because it is a constant stream of our products and warnings. WANE TV said NWSChat is their primary means of getting NWS data. Other comments from the media representatives included a desire for more forecast reasoning, warning decision making commentary during an event, etc in NWSChat. They also expressed a desire to be part of storm damage surveys. Basically, they would like a constant stream of the

latest information and thinking to pass on to their viewers. They want details and specifics in the HWO and AFD. For the HWO - storm mode, hail size, wind speeds, timing - which we break out for thunderstorms now. They also mentioned the need for up to date information and storm reports during severe weather. Without them, they are just repeating the same warning information over and over and people tune out. From the emergency management group, the media wanted more spotter ground truth reports, and also expressed a desire to have a concise listing of siren policy from various towns and county agencies. Lastly, the media mentioned they access NWSChat on their cell phones through an app called "Jabiru." Directions to install Jabiru were passed out, but the app is only available for Android phones.

Presentation 3: Emergency Management Perspective (Rick McCoy, Van Wert County OH EMA, and Clyde Avery, Marshall County EMA)

This presentation outlined the data that emergency managers use or would like to have. In the longer term, they use the SPC convective outlooks and the NWS hazardous weather outlooks. Closer to the event, they use the SPC watches and of course warnings from the WFOs. They use a wide variety of equipment and technology to receive data, including calls to 911 centers, amateur radio, NWSChat, telephones NWR, etc. Takeaway thoughts from this presentation include 1: 911 dispatch personnel are most often too busy to pass severe weather reports on to the NWS. They also are under the impression that the NWS already knows about the weather, and they don't need to tell us. 2: EMA staffing for many counties is a single person – maybe 2 or 3. 3. EM want to know about reports that fall below severe criteria, such as power outages, for their situational awareness.

Presentation 4: Social Media Wants You (Tim Brice, NWS El Paso TX)

Facebook has between 800 million and 1 Billion users. If it were a country, it would be the third largest in the world behind China and India. Twitter is one of the fastest ways (and one of the best in the presenter's opinion) of obtaining near real-time data. WFO Nashville TN has developed a network of spotters who report via Twitter, called T-Spotter. Twitter posts (Tweets) can be searched easily using hash-tags, and there are other applications (Hootsuite is one) that help you automate monitoring and searching functions of multiple Twitter feeds. The presentation also discussed YouTube (48 hours of new video uploaded every minute!), Google Plus (some nice features but not as many users), Chaser Web (streaming video and chase reports). We learned that you can tweet via SMS text message and/or a land line telephone bringing Twitter to many more users. Some other comments on social media were that it can be used to reduce workload (more tweets, fewer phone calls), build communication with our partners and customers. Suggestions when tweeting or posting to Facebook are to be conversational, don't over-automate (personalize postings), post photos (they attract more attention than just text). For instance, post questions, respond to rumors, and limit technical jargon.

One interesting quote from Brice's lunch presentation was "Meteorologists are now social media first responders".

Breakout group sessions:

Attendees were divided into four groups, each with a mix of NWS, EMA and media members. Each group was tasked with answering the question "what data do you need during severe weather?" In general, NWS wanted ground truth for warning decision making. EM's wanted to know what kind of damage would be produced, and who would be affected and what the impacts might be. Media wanted more real-time data including storm reports, photos, etc.

In Jim's breakout group, EMs mentioned that Nixle (free) or Code Red (expensive) were becoming prominent methods of disseminating info to the public, businesses and other government agencies. (Many of our EMs use these tools as well). They also use WebEOC. However, NWSChat is the one common ground between all 3 - NWS, media and EM. One suggestion was that if the ham net controller entered spotter reports directly into NWSChat, that could save a few steps and everyone would see the report. Presently hams report to net control, net control relays to NWS ham, who then writes it down and hands it to NWS person, who then enters it in LSR, which then puts it in NWSChat for all to see. Also in Jim's group, it was noted that since very few people in the group were familiar with Twitter, it was suggested to produce a short YouTube tutorial video on how to use Twitter.

After considering these needs, we then discussed how we can share this data amongst the different user groups, so that we all have access to it as quickly as possible. All groups acknowledged that a better way is needed to get reports from the first responders such as police and fire dispatch centers. The main problems seem to be that the dispatchers are very busy – thus creating a bottleneck, and how to get access to different data sources. There was some focus that NWSChat was a worthy platform, as it offers instant communication and a method for 2-way communication. There was also discussion of special Twitter accounts that could be monitored with data being shared quickly in that way. Some of the county governments are not in favor of using Twitter or Facebook, while some are.

After reconvening, the groups shared their findings and action items. Overall, the main finding was that the IWT should encourage the use of NWSChat as a 2-way data sharing tool to improve public safety, and provide timely and consistent sharing of data between the NWS, EM and media partners.

LOT Takeaway:

- In holding one of these it is critical to have a narrow/focused topic for discussion
- Ensure that the speakers from each group speak to their group as a whole, not just their own personal needs